



The TREE HOUSE A WILD Hangout

ORGANIZER:
What is the value of trees to my community?

ENGAGE - How can a tree be a home for wildlife?

Students perform the TREE HOUSE task card individually or in groups of two. Ask students to focus on one tree in their backyard, on the schoolgrounds, or in a nearby park for ten minutes. Compile a class list of evidence that trees provide habitat for other plants and animals. Create a graphic organizer with the class that illustrates how a tree can provide animals with the four main components of habitat: food, water, shelter and space. For more ideas, see Project Learning Tree activity "Trees As Habitats".

Reflect: How can a tree be a home for wildlife?
Which parts of the tree seem most important to animals?



Children's Literature Connections:
The Gift of the Tree by Alvin Tresselt
In the Woods: Who's Been Here?
by Lindsay Barrett George

OVERVIEW

A tree can provide food, water, shelter and space for other plants and animals. For example, on one tree: Squirrel tracks show a telltale path to buried nuts among the roots. A trail of ants climbs through lichens on the tree trunk. A spider web hangs from the lower branches. In the crown, a cup-shaped nest decorates a forked branch. A rope swing, tied to main limb, sways gently in the breeze. Each tree plays a part in a larger ecosystem. What people think about trees has far-reaching consequences for all forms of life.

Skills

Observation, Prediction

Kentucky Core Content

SC-E-3.1.2 Basic Needs of Organisms;
SC-M-3.5.1 Populations and Ecosystems

Time

10 class periods

Materials

Make a copy of the task card for each student. The task card can be put at the top of a blank sheet of paper to encourage writing on the remaining portion. Or the task card can be cut and laminated for repeated use and the student can make an entry in a journal.

EXPLORE - How is a tree important to other living things?

Students investigate one tree species to determine more interrelationships. This may be the tree observed in the Tree House task or another species. Try to study a variety of trees – evergreen and deciduous, native and nonnative, important mast producers (chestnut, oak, cherry, dogwood, beech, hickory and walnut), etc. A list of Kentucky native trees may be found at: <http://www.naturepreserves.ky.gov/NR/rdonlyres/976180AA-3313-45CD-9A1C-2B3480A37B2E/0/NativeTreesbrochure.pdf>.

Students generate their own questions about trees and their relationships. Students find the answers to at least one of their original questions and those that teacher assigns off the following list.

How do other organisms use the tree for food?

(ie., browse twigs, eat fruit, drink nectar from flowers)

How do other organisms use the tree for shelter?

(ie., control temperatures, windbreak, nesting sites, avoid predation)

EXPLORE (cont.)

- How does the tree provide water for other organisms?
(ie., dew on leaves, water storage in fruit, roots/leaves hold moisture in soil)
- Does the tree benefit from other organisms?
(ie., seed dispersal, pollination, eliminate pests)
- How is the tree harmed by other organisms?
(ie., competition, disease)

Suggested resources: [A Guide to Wildlife Food Habits](#) by Martin, A.C., Zim, H.S., and Nelson, A.L.; [The Complete Trees of North America](#) by Thomas S. Elias; and AWAKE website www.KentuckyAWAKE.org.

Reflect: How is a tree important to other living things?
How would the tree's interrelationships with other plants and animals change during the seasons or change over the tree life span?



Children's Literature Connection:
[My Favorite Tree: Terrific Trees of North America](#) by Diane Iverson



The TREE HOUSE A WILD Hangout Task Card

Examine a tree from top to bottom. Find evidence that animals and other plants use the tree as part of their habitat.

EXPLAIN - How is a tree part of the web of life?

Students create replica trees which "grow" into a class forest filled with organisms. Products may be three-dimensional models using cardboard tubes, paper mache and silk leaves, collages made from magazine clippings, or drawings like the Diagram of Flip-up Windows in Project Learning Tree activity "Adopt A Tree". Students present their tree to the class, showing the parts of the tree and describing relationships with other living things, then affix it to a classroom wall. Students make connections between their tree and another student's tree on the wall by stringing yarn between related points. For example, a squirrel in a nest in one student's oak tree may be connected to the nuts of another student's hickory tree. The collection of trees produces a "forest" mural. As more yarn connections are made from tree to tree, the forest web of life starts to appear. For more ideas, see the Project Learning Tree activity "Web of Life".

Reflect: Which tree species have the most connections?
Why do some trees have more interrelationships than other trees?
How is a tree part of the web of life?



Writing Prompt: The Arbor family wants to plant three new trees in their backyard. They enjoy relaxing under shady trees in the summer, eating fruit, and watching a variety of wild animals out their living room window. Which trees should they plant? Describe three reasons to support your choices.



Children's Literature Connection:
[One Small Square: Woods](#) by Donald M. Silver and Patricia Wynne

RESOURCES

Project Learning Tree –
www.plt.org Kentucky State
Coordinator 502 564-4496
JenniferL.Turner@ky.gov

KET's Electronic Field Trip to the Forest -
<http://www.ket.org/trips/forest/index.htm>.

What Is Forestry? Units of Study
<http://www.kentuckyawake.org/templates/curricula/ecosystems.cfm?category=8345>

[NatureScope Trees Are Terrific!](#) National Wildlife Federation www.nwf.org

Learn more about the 5 E Learning Cycle -
<http://forestry2.ca.uky.edu/wif/guide.pdf>

Conservation Education programs and materials are provided FREE by the Kentucky Department of Fish and Wildlife Resources. Thank a hunter, angler or boater who paid for this public service as well as other wildlife conservation activities.

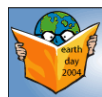
ELABORATE – What role do trees play in our lives?

Students work in groups of three to determine how people fit into the forest web of life. Assign each group to investigate one of these categories: health/environmental benefits (ie., clean water, clean air, heat, part of carbon cycle), forest products (lumber, ice cream, coal, shampoo), or recreation (ie., hiking, fishing, birdwatching, hunting, inspiration for art). Each group produces a list of ways people use a tree/forest within their category. Then each group produces artwork illustrating one person and his/her activity related to a tree/forest. Groups affix their artwork to the forest mural, explain the activity and string new connections between people and trees/wildlife. For example, the health benefit groups might show a person breathing oxygen released from tree leaves. Yarn connections could link a pine tree's needles and O₂ symbols and a person's nose. More yarn connections could link the O₂ symbols to other plants and animals that breathe oxygen. After the group presentations, try to make additional connections between other human activities and trees/wildlife. Go deeper with the Project Learning Tree activity "A Forest of Many Uses".

Reflect: How are people part of the forest web of life? How do human activities positively and negatively impact the forest?



Writing Prompt: A city council is debating whether to keep a local forest as a park or to develop it for office buildings. Which side would you choose? Address the city council with three reasons to support your decision.



Children's Literature Connection:
There's An Owl in My Shower
by Jean Craighead George



ELABORATE EXTRA

The Kentucky Department of Fish and Wildlife Resources' **Conservation Education** Program is a good set up for the **Elaborate** section.

"The Forest Ecosystem" program will introduce students to the value of Kentucky forests, their inhabitants and the consequences of human actions.

Each student also receives the new "Habitat at Home" page to share with their family.

EXTRA EXTRA

Kentucky Afield For Kids also features "The Forest Ecosystem" live on October 6, 2004 at 10:00 ET on KET3/Star Channel 703. Teachers may order VHS copies from KET ITV Services at 800 945-9167. This program also makes a nice complement to the **Elaborate** section.

<http://fw.ky.gov/navigation.asp?cid=192&NavPath=C105>

Win a WILD Visit

Send in work related to this unit for a chance to win a free WILD visit with live animals. Here are a few ideas:

- photos of your class forest
- student answers to the reflection questions
- student responses to the writing prompts
- your rubric for Evaluation

For more information, go to <http://fw.ky.gov/wildvisit.asp>.

EVALUATE - What did we learn about the value of trees?

Students write a story about themselves having an adventure in the forest. The storyline should show a change in attitude about one character's feelings about the forest and its inhabitants. Design a rubric to assess story content including: general description of the forest ecosystem, facts about plants and animals encountered in the woods, and human activities in the forest. For more ideas, see the Project Learning Tree activity "In the Forest of S.T. Shrew".

CULMINATING ACTIVITY – 2004 Louisville Courier Journal Conservation Contest

Prepare artwork or a writing piece based on the theme "Forest Health: Rx for Our Future". For more info on contest rules and additional resources, go to www.courier-journal.com/education/forest2004.